

What is claimed is:

1. A resin molding machine,

comprising:

a lower die on which a work piece to be molded is set;

an upper die clamping the work piece with said lower die;

a clamper being provided to said upper die, said clamper enclosing a resing molding space of said upper die, said clamper being capable of vertically moving in said upper die and always biased downward, wherein a lower end of said clamper is downwardly projected from a resin molding face of said upper die when said lower die and upper die are opened; and

a release film feeding mechanism feeding release film, which is easily peelable from said upper die and resin for molding, so as to cover the resin molding space.

2. The resin molding machine according to claim 1,

further comprising another release film feeding mechanism feeding release film so as to cover a surface of said lower die on which the work piece is set.

3. The resin molding machine according to claim 1,

further comprising a release film sucking mechanism, which fixes the release film on a lower end face of said clamper by air suction and which fixes the release film on an inner face of the resin molding space, which is constituted by the resin molding face of said upper die and an inner face of said clamper, by sucking air from an ceiling face of the resin molding space.

4. The resin molding machine according to claim 3,

wherein said release film sucking mechanism comprises:

a first air-hole being opened in the lower end face of said clamper;
a second air-hole being opened in an inner face of said clamper and
communicated to an air path, which communicates said second air-hole to a
side face of said upper die; and
an air sucking unit being communicated to said first air-hole and
second air-hole for air suction.

5. The resin molding machine according to claim 1,
wherein said upper die has a plurality of cavities, which respectively
correspond to element portions of the work piece.

6. The resin molding machine according to claim 5,
wherein said lower die has a plurality of cavities, which respectively
correspond to element portions of the work piece.

7. The resin molding machine according to claim 1,
wherein said upper die is capable of moving in the vertical direction
and biased toward said lower die.

8. The resin molding machine according to claim 1,
wherein said lower die further has an overflow cavity for
reservoiring resin overflowed from the resin molding space when the work
piece is molded with the resin; and

wherein said clamper has a resin path communicating the resin
molding space to the overflow cavity.

9. A method of resin molding,
comprising the steps of:
setting a work piece to be molded on a lower die;

feeding release film, which is easily peelable from the upper die and resin for molding, between an upper die and the work piece so as to cover a resin molding space of the upper die;

clamping the work piece and the release film by the upper die and the lower die; and

molding the work piece with the resin,

wherein a clamper, which is provided to the upper die, which encloses the resin molding space and which is capable of vertically moving and biased downward so as to downwardly projected a lower end of the clamper from a resin molding face of the upper die, contacts the work piece molded so as to seal peripheral of the resin molding space in said clamping step, and

wherein the resin is introduced into the resin molding space while the upper die is gradually moved to the lower die, the movement of the upper die is stopped at a clamping position, then the resin molding space is fully filled with the resin so as to completely mold the work piece.